



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------------|
| 10/511,799 | 10/19/2004 | Thomas Weiser | AT 020021 | 4797 |
| 24737 7590 07/06/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510 | | | EXAMINER WONG, ERIC K | |
| | | | ART UNIT 2883 | PAPER NUMBER |
| | | | MAIL DATE 07/06/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/511,799 | | WEISER, THOMAS | |
| | Examiner | | Art Unit | |
| | Eric Wong | | 2883 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims rejected in the prior office action have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

2. Applicant is advised that the Notice of Allowance mailed is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

3. The indicated allowability of claims in the Notice of Allowance dated 4/4/07 is withdrawn in view of the newly discovered reference(s) below. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/15422 to Verity.

Art Unit: 2874

Verity discloses in figure 1 and the associated text, a signal transmission system comprising:

- A signal source device (13) [“second module” comprising “earphone analog signal translator (16) and “light transmitter means” (17)] for generating a transmission signal [“earphone modulated light signal”; page 3, last paragraph];
- A signal sink device (1) [“first module” comprising “earphone light receiver” (7), earphone signal demodulation translator” (6), “earphone driver circuit” (5), and “earphone” (4)] for processing the transmission signal; and
- Transmission means (12) [“fiber optic cable”] provided between and coupled to the signal source device (13) and the signal sink device (1) for the transmission of signals [portions of the conversation],
- Said transmission means (12) transmitting a signal representing the transmission signal from the signal source device (13) to the signal sink device (1), characterized in that the signal source device emits [via light transmitter (17)] an optical signal representing the generated transmission signal generated, the signal sink device receives the optical signal emitted by the signal source device, and in that the transmission means is formed by light-guiding means optically coupled to the signal source device and the sink device for transmitting the optical signal from the signal source to the signal sink device.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2874

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 4, 7, 9, 11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verity as applied to claims 1 and 15 above, and further in view of United States Patent Number 5,602,669 to Chaki.

Verity discloses the invention as claimed except for a device arranged at a distance with an air gap. It is noted that replacing a cable with wireless IR is well known in the art.

Chaki discloses an optical transmission system using an infrared transmission. Chaki further discloses a headphone (garment), scattering IR signals and a photodetector.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace a fixed wireline transmission system with that of a wireless one as taught by Chaki (including associated parts) to reduce parts and inconvenience.

8. Claims 3, 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verity in view of Chaki (VC) as applied to claims above, and further in view of United States Patent Number 5,774,338 to Wessling III (hereinafter Wessling).

VC discloses an infrared signal transmission system to transmit signals between a source and a receiver (headphones, speakers, etc), but fails to explicitly disclose a fiber bundle associated with a garment. Examiner notes that use of single fibers or multiple fiber bundles are well known in the art. The use of multiple fibers to increase bandwidth is commonly known in the art.

Wessling discloses the association of garments with transmission lines.

Art Unit: 2874

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the integrated garment of Wessling and embed and fasten components of VC in order to allow independent adjustment of the torso region to prevent catching/snaring of the transmission lines.

9. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over VC as applied to claims above, and further in view of United States Patent Number 6,900,777 to Herbert et al (hereinafter Herbert).

VC discloses an optical transmission system with a photodetector, but fails to explicitly disclose the use of a planar photodetector. Examiner notes that the use of planar photodetectors are commonly used in the art to provide maximum coupling with minimal losses.

Herbert discloses such a common photodetector (column 4, line 10) to collect optical energy.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the planar photodetector of Herbert in the signal transmission system of VC in order to reduce coupling losses.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Wong whose telephone number is 571-272-2363. The examiner can normally be reached on Monday through Friday, 830AM - 430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

//Eric Wong//

EW

M.R. Connelly-Cushwa
MICHELLE CONNELLY-CUSHWA
PRIMARY EXAMINER
7/2/07